

Trends in Westford Recycling Efforts (FY2014)

	Westford had a increase of 132.2 tons of recycling in FY2014 compared to the previous year.
Recycling	This is an 4.6 % increase over this period.

Westford had a decrease of 93.2 tons of trash in FY2014 compared to the previous year. This is a 1.2 % decrease in trash Trash during this period which resulted in tipping fees savings of \$6,805.06. The current tipping fee per ton of trash is \$73 which increased from \$71 starting in July 2013.

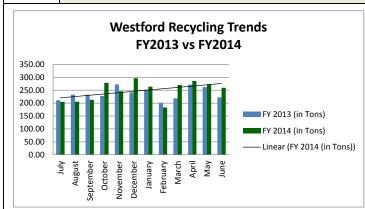
Recycling data show increase of 132.2 tons of recycling. Trash data show overall decrease of 93.2 tons of trash. Summary Tipping fees savings of \$6,805.06 in the FY2014.

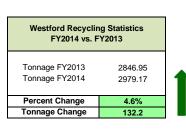
Overall positive trends in both recycling increases and trash reductions.

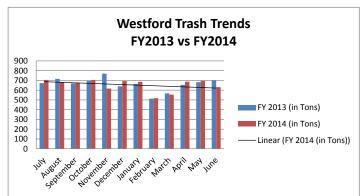
Notes regarding mandatory recycling

Westford began to enforce its "mandatory recycling" policy beginning the 1st of February 2013.

Since the WRC recommended to the Town of Westford management, the trends are showing positive results and it appears the policy is working effectively (in addition to increases in overall recycling activities).







Westford Trash FY2014 vs. F	
Tonnage FY2013	7944.09
Tonnage FY2014	7850.87
Percent Change	-1.2%
Tonnage Change	-93.2
Tipping fee (decrease)	\$ (6,805.06)
т.рр3 ()	(0,000.00)

The Mission of the Westford Recycling Commission is to:

- Increase awareness of recycling benefits to the Town of Westford.
- 2. Educate Westford residents on recycling options.
- Provide opportunities for non-curbside recycling.
- 4. Implement programs that encourage diverting recyclables from the trash.



Westford Trash - Recycling Data and Statistics

The data shows recent trends in both recycling and trash tonnage

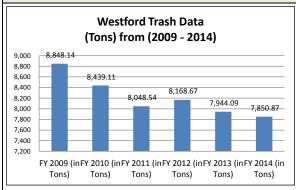
Values and figures in GREEN reflect a positive change in the trash reduction or recycling increases per the data Values and figures in RED reflect a negative change in the trash increases or recycling decrease per the data

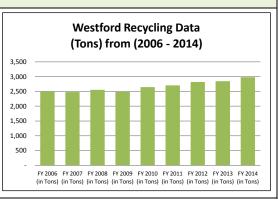
Assumptions and Notes

Residents are recycling less newspaper over the past few years. **Definition:** The **trash tipping fee** is the cost per ton of trash removed which includes incinerator and transport costs

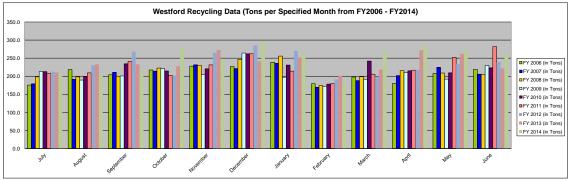
Trash tipping fee savings (or increases) are calculated on the difference in trash tonnage (month over month or year over year) The current tipping fee per ton is \$73 which increased from \$71 starting in July 2013.

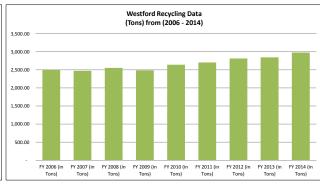
The cost to the Town of Westford for trash removal is based on a per ton fee, whereas recycling is a flat fee (weight independent). Source of trash comes from residence (homes), schools, town/municipal buildings, not commercial buildings or businesses. Source of recyclables comes from residence (homes), schools, town/municipal buildings, not commercial buildings or businesses



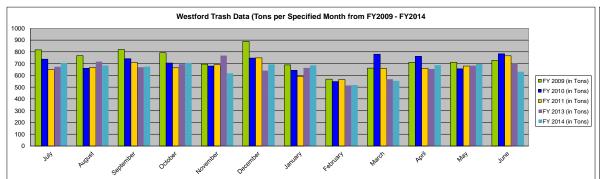


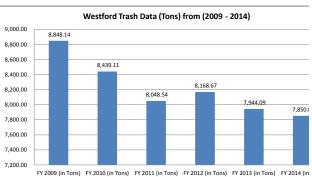
	Westford Recycling Data and Statistics																		
Monthly Recycling Data (per Westford Fiscal Year)								Re	Recycling (Tonnage Change) per Fiscal Year				Recycling (% Change) per Fiscal Year						
Month	FY 2006 (in Tons)	FY 2007 (in Tons)	FY 2008 (in Tons)	FY 2009 (in Tons)	FY 2010 (in Tons)	FY 2011 (in Tons)	FY 2012 (in Tons)	FY 2013 (in Tons)	FY 2014 (in Tons)		Monthly FY2010 FY2011 Change (in Tons)		· Monthly FY2012 FY2013 Change (in Tons)		Monthly FY2009 - FY2010 % Change	Monthly FY2010 - FY2011 % Change	Monthly FY2011 - FY2012 % Change	Monthly FY2012 - FY2013 % Change	Monthly FY2013 FY2014 % Change
July	175.9	178.75	198.53	212.84	212.88	208.41	212.83	211.01	204.75	0.04	-4.47	4.42	-1.82	-6.26	0.02%	-2.10%	2.12%	-0.86%	-2.97%
August	218.6	191.16	198.43	189.35	198.96	209.26	230.38	232.96	205.36	9.61	10.30	21.12	2.58	-27.60	5.08%	5.18%	10.09%	1.12%	-11.85%
September	204.3	210.77	199.48	201.06	234.36	241.42	267.97	232.97	212.91	33.30	7.06	26.55	-35.00	-20.06	16.56%	3.01%	11.00%	-13.06%	-8.61%
October	217.3	214.26	222.75	221.50	214.54	202.24	202.26	227.93	278.56	-6.96	-12.30	0.02	25.67	50.63	-3.14%	-5.73%	0.01%	12.69%	22.21%
November	227.83	231.61	230.31	205.22	220.58	231.53	265.05	272.73	245.58	15.36	10.95	33.52	7.68	-27.15	7.48%	4.96%	14.48%	2.90%	-9.95%
December	227.23	221.22	245.96	264.47	262.03	262.33	285.33	241.59	296.73	-2.44	0.30	23.00	-43.74	55.14	-0.92%	0.11%	8.77%	-15.33%	22.82%
January	238.8	235.94	255.82	197.43	231.18	214.42	270.30	251.87	263.53	33.75	-16.76	55.88	-18.43	11.66	17.09%	-7.25%	26.06%	-6.82%	4.63%
February	179.26	169.75	174.52	172.07	178.58	179.66	191.40	201.14	183.12	6.51	1.08	11.74	9.74	-18.02	3.78%	0.60%	6.53%	5.09%	-8.96%
March	197.72	188.41	198.68	191.26	242.34	205.73	199.98	218.42	270.29	51.08	-36.61	-5.75	18.44	51.87	26.71%	-15.11%	-2.79%	9.22%	23.75%
April	180.44	202.13	215.42	210.17	214.98	216.94	217.75	272.06	286.18	4.81	1.96	0.81	54.31	14.12	2.29%	0.91%	0.37%	24.94%	5.19%
May	207.87	224.54	209.11	192.25	209.31	252.31	234.12	262.11	272.95	17.06	43.00	-18.19	27.99	10.84	8.87%	20.54%	-7.21%	11.96%	4.14%
June	219.27	205.87	205.27	229.92	223.09	282.10	239.25	222.16	259.21	-6.83	59.01	-42.85	-17.09	37.05	-2.97%	26.45%	-15.19%	-7.14%	16.68%
Recycling Total Tonnage per Fiscal Year	2,494.44	2,474.41	2,554.28	2,487.54	2,642.83	2,706.35	2,816.62	2,846.95	2,979.17	155.29	63.52	110.27	30.33	132.22	6.24%	2.40%	4.07%	1.08%	4.64%
Notes		Values and figures in GREEN reflect a positive change in recycling (increase). Values and figures in RED reflect a negative change in the recycling (decrease).																	





	Westford Trash Data and Statistics															
	Monthly Trash Data (per Westford Fiscal Year)						Trash (Tonnage Change) per Fiscal Year				Trash (% Change) per Fiscal Year					
Month	FY 2009 (in Tons)	FY 2010 (in Tons)	FY 2011 (in Tons)	FY 2012 (in Tons)	FY 2013 (in Tons)	FY 2014 (in Tons)	Monthly FY2009 - FY2010 Change (in Tons)		Monthly FY2011 - FY2012 Change (in Tons)	Monthly FY2012 - FY2013 Change (in Tons)		Monthly FY2009 - FY2010 % Change	Monthly FY2010 - FY2011 % Change	Monthly FY2011 - FY2012 % Change	Monthly FY2012 - FY2013 % Change	Monthly FY2013 - FY2014 % Change
July	817.18	737.78	649.63	658.5	672.61	705.1	-79.4	-88.15	8.87	14.11	32.49	-9.72%	-11.95%	1.37%	2.14%	4.83%
August	767.58	660.24	666.6	728.21	716.57	684.39	-107.34	6.36	61.61	-11.64	-32.18	-13.98%	0.96%	9.24%	-1.60%	-4.49%
September	819.08	741.61	708.71	760.25	669.25	674.68	-77.47	-32.9	51.54	-91	5.43	-9.46%	-4.44%	7.27%	-11.97%	0.81%
October	792.34	704.82	664.00	659.78	694.76	705.15	-87.52	-40.82	-4.22	34.98	10.39	-11.05%	-5.79%	-0.64%	5.30%	1.50%
November	695.33	679.16	690.39	793.36	768.92	616.95	-16.17	11.23	102.97	-24.44	-151.97	-2.33%	1.65%	14.91%	-3.08%	-19.76%
December	888.46	746.85	749.18	689.84	640.11	693.45	-141.61	2.33	-59.34	-49.73	53.34	-15.94%	0.31%	-7.92%	-7.21%	8.33%
January	689.13	643.02	592.16	660.69	664.24	685.32	-46.11	-50.86	68.53	3.55	21.08	-6.69%	-7.91%	11.57%	0.54%	3.17%
February	568.16	547.13	563.37	562.09	513.92	518.49	-21.03	16.24	-1.28	-48.17	4.57	-3.70%	2.97%	-0.23%	-8.57%	0.89%
March	661.64	779.8	659.33	630.74	567.50	553.65	118.16	-120.47	-28.59	-63.24	-13.85	17.86%	-15.45%	-4.34%	-10.03%	-2.44%
April	710.12	760.20	659.79	639.53	654.72	686.62	50.08	-100.41	-20.26	15.19	31.9	7.05%	-13.21%	-3.07%	2.38%	4.87%
May	710.78	655.40	679.56	677.58	682.00	695.92	-55.38	24.16	-1.98	4.42	13.92	-7.79%	3.69%	-0.29%	0.65%	2.04%
June	728.34	783.10	765.82	708.10	699.49	631.15	54.76	-17.28	-57.72	-8.61	-68.34	7.52%	-2.21%	-7.54%	-1.22%	-9.77%
Trash Total Tonnage per Fiscal Year	8,848.14	8,439.11	8,048.54	8,168.67	7,944.09	7,850.87	-409.03	-390.57	120.13	-224.58	-93.22	-4.62%	-4.63%	1.49%	-2.75%	-1.17%
Notes		Values and figures in GREEN reflect a trash reduction (This is a positive or good trend). Values and figures in RED reflect a trash increase (This is a negative trend).														







Trends in Westford Recycling Efforts (FY2013)

B P	Westford had a increase of 30.33 tons of recycling in FY2013 compared to the previous year.
Recycling	This is an 1.08 % increase over this period.

that period which resulted in tipping fees savings of \$15,945.18.

The current tipping fee per ton is \$71 which will increase to \$73 starting in July 2013.

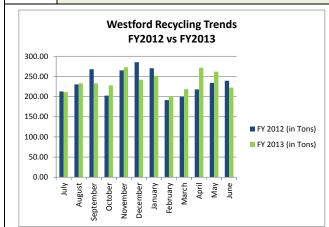
Westford had a tipping fee savings of \$15,945,18 during the FY2013 period compared to FY2012. Savings

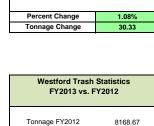
Notes regarding mandatory recycling policy

Westford began to enforce its mandatory recycling policy beginning the 1st of February 2013.

The data for February through June 2013 show that recycling has **increased by +8.63% or +93.4 tons** when compared to the previous period in FY2012 and trash tonnage **decreased by -3.12% or -100.4 tons** when compared to the previous period in FY2012. It appears the policy is helping, however additional data in the forthcoming months is needed to provide more conclusive evidence as to the effectiveness of the new policy (it is too early to draw firm conclusions)

Westford had a decrease of 224.58 tons of trash in FY2013 compared to the previous year. This is a 2.75% decrease during

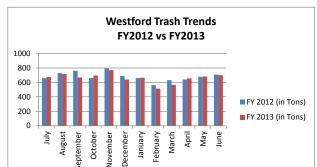




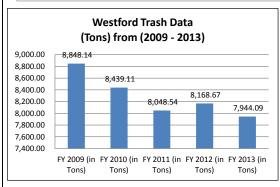
Westford Recycling Statistics FY2013 vs. FY2012

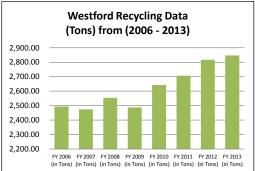
2816.62

Tonnage FY2012









The Mission of the Westford Recycling Commission is to:

- Increase awareness of recycling benefits to the Town of Westford.
 Educate Westford residents on recycling options.
- 3. Provide opportunities for non-curbside recycling. 4. Implement programs that encourage diverting recyclables from the trash.



Westford Trash - Recycling Data and Statistics

The data shows recent trends in both recycling and trash tonnage
Values and figures in GREEN reflect a positive change in the trash reduction or recycling increases per the data
Values and figures in RED reflect a negative change in the trash increases or recycling decrease per the data

Assumptions and Notes

Residents are recycling less newspaper over the past few years.

Definition: The trash tipping fee is the cost per ton of trash removed which includes incinerator and transport costs.

Trash tipping fee savings (or increases) are calculated on the difference in trash tonnage (month over month or year over year) The current tipping fee per ton is \$71 which will increases to \$73 starting in July 2013.

The cost to the Town of Westford for trash removal is based on a per ton fee, whereas recycling is a flat fee (weight independent). Source of trash comes from residence (homes), schools, town/municipal buildings, not commercial buildings or businesses. Source of recyclables comes from residence (homes), schools, town/municipal buildings, not commercial buildings or businesses.



Trends in Westford Recycling Efforts (FY2012)

Recycling

Westford had an **increase** of **110.27** tons of recycling in FY2012 compared to the previous year. This is an 4.1 % increase during this period.

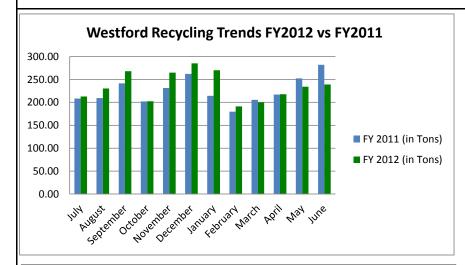
In the first half of FY2012, recycling increased more than in the second half of FY2012.

Trash

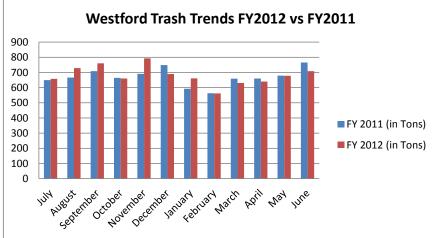
Westford had an **increase** in **120.13** tons of trash in FY2012 compared to the previous year. This is a 1.49% increase during that period and equates to an increase in tipping fees of \$8,529.23. (The current tipping fee per ton is \$71)

The WRC is exploring the increase and confirming the data; currently the Commission does not have information as to why the town trash tonnage has increased. The WRC notes that during the second half of FY2012, there was a decrease in recycling.

Savings Westford had a tipping fee increase of \$8,529.23 during the FY12 period compared to FY11, hence no savings.

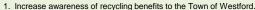


Westford Recycling Statistics FY2012 vs FY2011								
Tonnage FY2011	2706.35							
Tonnage FY2012	2816.62							
Percent Change	4.07%							
Tonnage Change	110.27							



Westford Trash Statistics FY2012 vs FY2011								
Tonnage FY2011	8048.54							
Tonnage FY2012	8168.67							
Percent Change	1.49%							
Tonnage Change	120.13							
Tipping fee (increase)	\$ 8,529,23							

The Mission of the Westford Recycling Commission is to:



- 2. Educate Westford residents on recycling options.
- 3. Provide opportunities for non-curbside recycling.
- 4. Implement programs that encourage diverting recyclables from the trash.

Westford Trash - Recycling Data and Statistics

The data shows recent trends in both recycling and trash tonnage

Values and figures in **GREEN** reflect a positive change in the trash reduction or recycling increases per the data Values and figures in **RED** reflect a negative change in the trash increases or recycling decrease per the data

Assumptions and Trends

Residents are recycling less newspaper over the past few years.

The number of households in Westford has increased over the last few years (Currently 22,624 residents).

The number of persons in Westford has increased over the last few years (Currently 7396 homes).

Definition: The **trash tipping fee** is the cost per ton of trash removed which includes incinerator and transport costs.

Trash tipping fee savings (or increases) are calculated on the difference in trash tonnage (month over month or year over year)
The trash tipping fees were reduced from \$73 per ton (in 2009) to \$67 per ton (in 2010). The current trash tipping fee per ton is **\$67.00.**

The cost to the Town of Westford for trash removal is based on a per ton (in 2010). The cost to the Town of Westford for trash removal is based on a per ton fee, whereas recycling is a flat fee (weight independent). Source of trash comes from residence (homes), schools, town/municipal buildings, not commercial buildings or businesses. Source of recyclables comes from residence (homes), schools, town/municipal buildings, not commercial buildings or businesses.

Summary of Westford Recycling Efforts (FY2010 and FY2011)

Recycling - Westford had an increase in 155.29 tons of recycling at end FY2010. This is a 6.25% increase during that year.

Recycling - Westford had an increase in 63.56 tons of recycling at end FY2011. This is a 2.4% increase during that year.

Trash - Westford had a decrease in 409.03 tons of trash at end FY2010. This is a 4.62% decrease during that year.

Trash - Westford had a decrease in 309.57 tons of trash at end FY2011. This is a 4.63% decrease during that year.

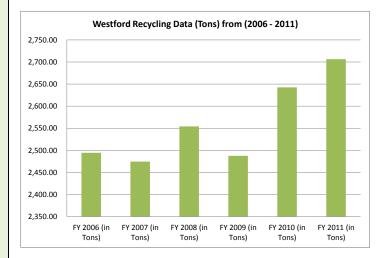
Savings - Westford had a tipping fee savings of \$29,859.20 at end FY2010.

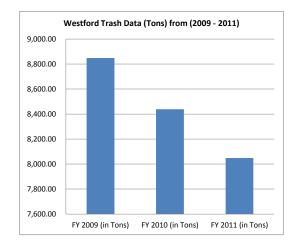
Savings - Westford had a tipping fee savings of \$20,741.19 at end FY2011.

Savings are calculated on overall increase or decrease in tonnage multiplied by tipping fees.

Per Capita (Trash) - Westford residents produce 0.36 tons (711 lbs) of trash per person and 1.1 Tons (2,161 lbs) of trash per home per year in FY2011.

Per Capita (Recycling) - Westford residents recycle 0.12 tons (233 lbs.) per person and 0.36 Tons (727 lbs.) per home per year in FY2011.





Westford Population and Housing Data

Population Data

Total Westford Population: 22,624 (Urban: 22,043, Rural: 581 (all nonfarm) Source: City-Data)

Total Westford Population: 20,868 persons (Source: from Westford 2009 Census Returns)

Read more: http://www.city-data.com/housing/houses-Westford-Massachusetts.html#ixzz1Mnjilklg

Housing Data

Total Westford Houses: 6,941 (6,808 occupied: 6,258 owner occupied, 550 renter occupied) Source: City-Data)

Total Westford Housing: 7,396 (Single 6,276, Condo 992, 2 Family 92, Multi-family 36) Source: Westford Assessors Office)

Read more: http://www.city-data.com/housing/houses-Westford-Massachusetts.html#ixzz1MnjoU01E

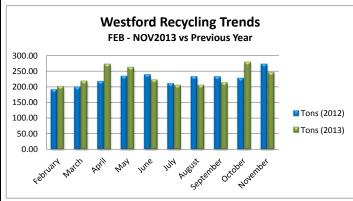
Housing density: 227 houses/condos per square mile

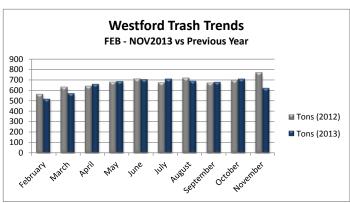
Note: The WRC is currently updating these statistics....



Results in Westford Recycling Efforts since the February 2013 Mandatory Recycling Police

	Results in Westford Recycling Errorts since the February 2013 Mandatory Recycling Folicy
Recycling	Westford had a increase of 62.95 tons of recycling from FEB2013 to NOV2013 (since the start of the mandatory recycling policy) compared to the same period previous year. This is an 2.79 % increase over this period.
Trash	Westford had a decrease of 236.25 tons of trash from FEB2013 to NOV2013 (since the start of the mandatory recycling policy) compared to the same period previous year. This is a 3.51% decrease during that period which resulted in tipping fees savings of \$17,010.00. The tipping fee per ton of trash is/was \$71 which will increase to \$73 starting in July 2013.
Savings	Westford had a comparable tipping fee savings of \$17,010.00 during the periods compared.
Notes regarding mandatory recycling policy	Westford began to enforce its mandatory recycling policy beginning the 1st of February 2013. It appears the policy is helping, and the WRC will continue to assess data in the forthcoming months to provide more conclusive evidence as to the effectiveness of the new policy.





Westford Recyclin FEB - NOV2013 vs F	_
Tonnage FEB-NOV 2012	2260.10
Tonnage FEB-NOV 2013	2323.05
Percent Change	2.79%
Tonnage Change	62.95

FEB - NOV2013 vs I	Previous Year
Tonnage FEB-NOV 2012 Tonnage FEB-NOV 2013	6740.15 6503.90
Percent Change	-3.51%
Tonnage Change	-236.25
Tipping fee (decrease)	\$ (17,010.00)

Westford Trash Statistics

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